



The Secretary of Energy
Washington, DC 20585

July 31, 2006

The Honorable Richard B. Cheney
President of the Senate
Washington, D.C. 20510

Dear Mr. President:

In accordance with Sections 631(a) and (b)(1)(A) of the Energy Policy Act of 2005 (Public Law 109-58), the enclosed report provides: (1) notification of the designation of the office within the Department of Energy (DOE) to have the responsibility of completing activities needed to provide a facility for safely disposing of greater-than-class C (GTCC) low-level radioactive waste and (2) the estimated cost and a proposed schedule to complete an environmental impact statement (EIS) and record of decision for a permanent-disposal facility for GTCC radioactive waste.

The report also includes a preliminary discussion of the potential range of reasonable disposal alternatives under consideration for the disposal of such waste. Pursuant to Section 631 (b)(1)(B) of the Act, DOE will submit a more detailed report to Congress that describes the disposal alternatives under consideration, after the issuance of the final EIS in 2008. Pending subsequent Congressional action, DOE will make a decision on the disposal alternative or alternatives to be implemented.

If you have any questions regarding this report, please feel free to contact me or Ms. Jill L. Sigal, Assistant Secretary for Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

A handwritten signature in black ink that reads "Samuel W. Bodman".

Samuel W. Bodman

Enclosure



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Report to the U.S. Congress

Under Public Law 109-58, *The Energy Policy Act of 2005*

The Estimated Cost and Proposed Schedule to Complete the *Environmental Impact Statement and Record of Decision for the Disposal of Greater- Than-Class C Low-Level Radioactive Waste*

Prepared by:

**U.S. Department of Energy
Office of Environmental Management
Office of Regulatory Compliance, EM-10
July 2006**

LIST OF ACRONYMS

ANOI	Advance Notice of Intent
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
EIS	Environmental Impact Statement
EPAct 2005	Energy Policy Act of 2005
GTCC	Greater-Than-Class C
LLRWPA	Low-Level Radioactive Waste Policy Amendments Act of 1985
LLW	Low-Level Waste
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NRC	U.S. Nuclear Regulatory Commission
ROD	Record of Decision

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

Pursuant to sections 631(a) and (b)(1)(A) of Public Law 109-58, the Energy Policy Act of 2005 (EPAAct 2005), this report provides notification of the designation of the office within the U.S. Department of Energy (DOE) to have responsibility for completing activities needed to provide the permanent disposal facility for safely disposing of greater-than-class C (GTCC) low-level radioactive waste (LLW). The report also identifies the estimated cost and a proposed schedule to complete an environmental impact statement (EIS) and record of decision (ROD) for a permanent disposal facility for GTCC LLW, as required by the EPAAct 2005, section 631(b)(1)(A). Lastly, it provides a preliminary discussion of the potential range of disposal alternatives under consideration for the disposal of GTCC LLW. Pursuant to section 631(b)(1)(B) of the EPAAct 2005, DOE will submit a more detailed report to Congress that describes the disposal alternatives under consideration, after the issuance of the final EIS in 2008, and await action by Congress before the Secretary makes a final decision on the disposal alternative or alternatives to be implemented.

In February 2006, the Department's National Nuclear Security Administration submitted the report to Congress titled "*Plan to Ensure Continued Recovery and Storage of Greater-Than-Class C Low-Level Radioactive Sealed Sources that Pose a Security Threat Until a Permanent Disposal Facility is Available.*" That report responded to legislative requirements found in section 631(b)(2) of the EPAAct 2005.

1.2 Background

Section 3(b)(1)(D) of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (LLRWPA) assigns to the Federal government responsibility for the disposal of GTCC LLW. The LLRWPA specifies that GTCC LLW be disposed of in a facility licensed by the U.S. Nuclear Regulatory Commission (NRC) that the NRC determines is adequate to protect public health and safety. The LLRWPA further states that the Secretary of Energy shall issue a report recommending safe disposal options for such waste. DOE issued such a report in 1987, which acknowledged that DOE has the responsibility for the disposal of GTCC LLW.

GTCC waste is LLW generated from activities conducted by NRC licensees and has concentrations of radionuclides that exceed the limits established by the NRC for Class C radioactive waste, as defined by 10 CFR 61.55, "Waste Classification." The NRC defines LLW classes as A, B, and C by the concentration of specific short- and long-lived radionuclides, with Class C having the highest concentration limits (see 10 CFR part 61, "Licensing Requirements for Land Disposal of Radioactive Waste"). Under NRC regulations (10 CFR 61.55), Class A, B, and C wastes are generally acceptable for disposal in a near-surface disposal facility licensed by NRC or an Agreement State. For GTCC waste, the regulations state that such waste is generally not acceptable for near-surface disposal and that the waste must be disposed of in a geologic repository unless alternate proposals for disposal of such waste in a NRC licensed facility are approved by the NRC.

GTCC LLW generally occurs in three forms: (1) sealed sources, which contain radionuclides in concentrated, relatively small, encapsulated packages that are widely used in medicine, agriculture, research, and industry; (2) GTCC-activated metals, which are primarily generated by the decommissioning of nuclear power plants; and (3) other GTCC LLW, which consists of an assortment of wastes such as glove boxes, fuel fabrication equipment, and trash resulting from source manufacture, research, utility, medical, and industrial activities. In addition, DOE has waste inventories with characteristics similar to GTCC LLW and which otherwise may not have an identified path to disposal. DOE is considering including those DOE wastes in the scope of the GTCC EIS as well. DOE is developing an updated inventory of GTCC LLW and will publish information on the updated inventory in a Notice of Intent (NOI) to prepare the EIS that will be issued in accordance with the National Environmental Policy Act (NEPA).

2.0 DESIGNATED ORGANIZATION FOR COMPLETING THE EIS

The Department's Office of Environmental Management is the designated office responsible for completing activities needed to provide the permanent disposal facility for safely disposing of all GTCC LLW. The U.S. Environmental Protection Agency has agreed to be a cooperating agency in the development of the GTCC EIS, and the NRC has agreed to be a commenting agency.

3.0 ESTIMATED COST FOR COMPLETING THE EIS AND ROD

The current estimated cost to complete the GTCC EIS and ROD is \$5.2 million. The \$5.2 million estimate includes activities to: (1) develop an updated inventory of GTCC LLW to analyze in the EIS (the most recent inventory was developed in 1993-1994), (2) prepare the Advance Notice of Intent (ANOI), which was issued in May 2005, and the NOI, (3) conduct public scoping meetings and hearings, (4) develop technical baseline documents (e.g., site engineering, cost, and site characterization data) to support the EIS analysis, (5) prepare the draft EIS and final EIS, (6) prepare the report to Congress describing GTCC disposal alternatives, (7) prepare the ROD, (8) maintain the administrative record, and (9) support project management.

The cost estimate is based on programmatic, technical, and schedule assumptions. Changes to these assumptions or unexpected conditions could impact the total cost of the GTCC EIS.

4.0 ESTIMATED SCHEDULE FOR COMPLETING THE EIS AND ROD

The estimated schedule for completing the EIS and ROD is provided below.

	<u>Estimated Completion Date</u>
Issue NOI	December 2006
Issue Draft EIS	January 2008
Issue Final EIS	October 2008
Issue Report to Congress Describing GTCC Disposal Alternatives	October 2008
Issue ROD	Following Congressional Action

This schedule was developed based on best available data and certain technical and programmatic assumptions. Changes to these assumptions, such as revised waste inventory estimates, could impact the proposed schedule. The Department expects to issue the ROD within 60 days after Congressional action on DOE's report to Congress describing GTCC disposal alternatives, pursuant to section 631(b)(1)(B)(ii) of the EAct 2005.

5.0 PRELIMINARY DISCUSSION OF POTENTIAL RANGE OF DISPOSAL ALTERNATIVES

In May 2005, DOE issued an ANOI to prepare the EIS for disposal of GTCC LLW and identified the potential range of reasonable disposal alternatives. These alternatives include deep geologic disposal facilities; existing LLW disposal facilities, both commercial and DOE; new facilities at DOE or other government sites, or on private land; intermediate depth disposal configurations (e.g., engineered borehole facility); and enhanced near-surface disposal facilities. The varied forms of GTCC LLW may be conducive to the consideration of multiple locations and disposal methods and will be appropriately reflected in the alternatives evaluated in the EIS. The specific alternatives will be defined following the publication of the NOI and the subsequent public scoping meetings.

6.0 CONCLUSIONS

This report fulfills the requirements of the EAct 2005, sections 631(a) and (b)(1)(A) concerning the cost and schedule to complete the GTCC LLW EIS and the designated office within the Department that has the responsibility for completing the GTCC activities. The DOE's Office of Environmental Management has initiated the process to develop GTCC disposal capability, with current progress focused on completing the NEPA process to evaluate disposal alternatives. DOE will report on the status of the disposal of GTCC LLW EIS and other DOE NEPA documents on its NEPA website at <http://www.eh.doe.gov/nepa/docsta.html>.